

MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Total Maximum Daily Load Information Sheet

White Oak Creek

Water Body ID: 3182

Water Body Segment at a Glance:

Counties: Jasper and Lawrence
Nearby City: Avilla
Impaired Length: 18 miles
Pollutant: *E. coli* bacteria
Source: Rural nonpoint sources



Statewide Map Showing Location of Watershed

Scheduled for TMDL development:

TMDL development schedules are subject to change.

The most current schedule for TMDL development is available on the department's website at

dnr.mo.gov/env/wpp/blwdl/wpc-tmdl-progress.htm.

Description of the Problem

A water body is considered impaired when it fails to meet applicable water quality standards. Water quality standards consist of designated uses, water quality criteria, an antidegradation policy and implementation procedures. White Oak creek is impaired due to exceedances of water quality criteria that protect recreational uses.

Designated uses of White Oak Creek*

- Warm Water Habitat (WWH)
- Whole Body Contact Recreation Category A (WBC-A)
- Secondary Contact Recreation (SCR)
- Human Health Protection (HHP)
- Irrigation (IRR)
- Livestock and Wildlife Protection (LWP)

*In addition to these specific uses, all waters of the state are protected by the general water quality criteria that are specified in the state's Water Quality Standards at 10 CSR 20-7.031(4).

Use that is impaired

- Whole Body Contact Recreation Category A (WBC-A)

Criteria that apply

- Missouri's Water Quality Standards at 10 CSR 20-7.031(5)(C) and Table A state that for waters designated for whole body contact recreation category a, the *E. coli* bacteria count, measured as a geometric mean, shall not exceed 126 per 100 milliliters of water during the recreational season. The recreational season is defined as being from April 1 to October 31.

Background information and water quality data

High counts of *E. coli* are an indication of fecal contamination and an increased risk of pathogen-induced illness to humans. *E. coli* are bacteria found in the intestines of warm-blooded animals and are used as indicators of the risk of waterborne disease from pathogenic bacteria or viruses. The department judges a stream to be impaired by bacteria if the water quality criterion is exceeded in any of the last three years for which there is a minimum of five samples taken during the recreational season. The most recent data used to assess water quality in White Oak Creek was collected in 2007 and 2010. Data from 2007 was found to be exceeding the category A whole body contact criterion.

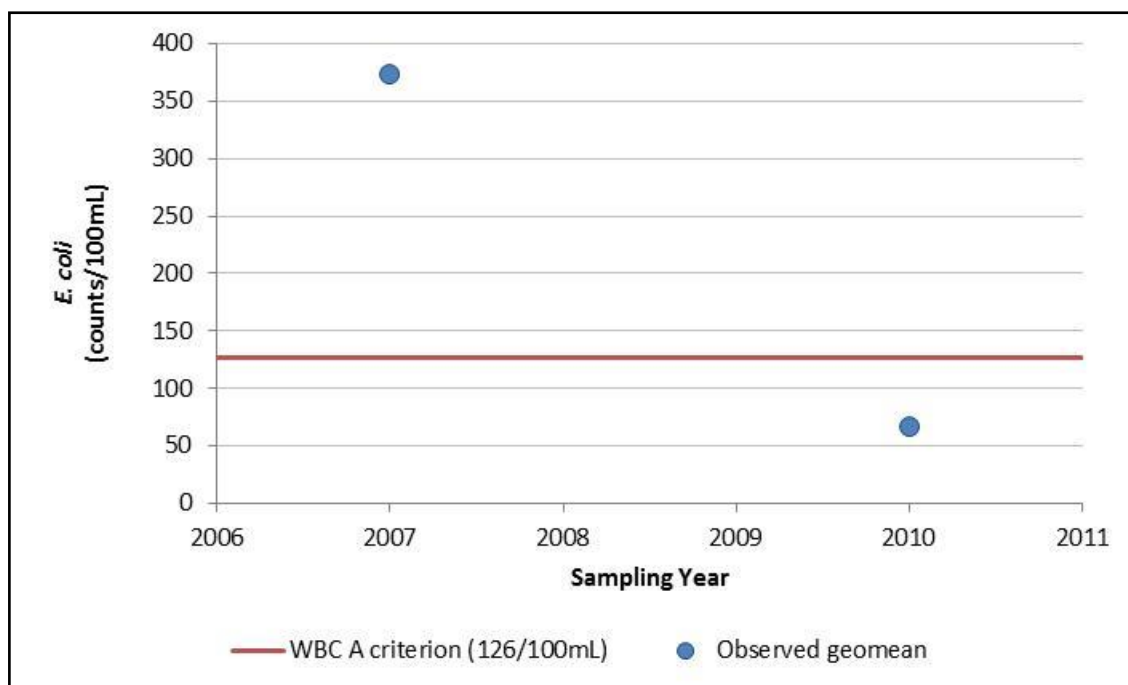
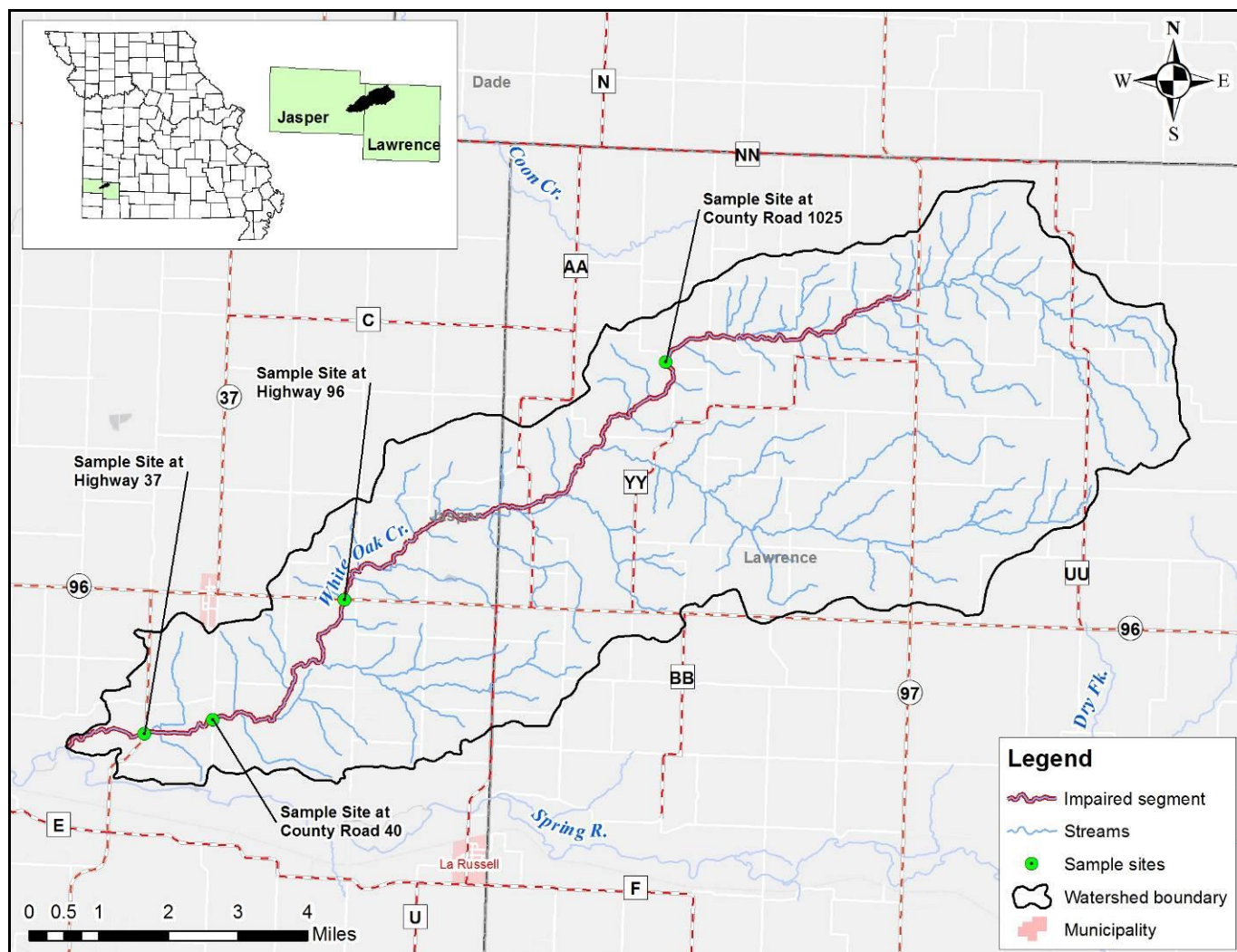


Figure 1. Recreational season geometric mean *E. coli* data for White Oak Creek

TMDL for White Oak Creek

The White Oak Creek TMDL will calculate the maximum amount of each listed pollutant that the stream can receive and still meet water quality standards. The TMDL will also identify all potential or suspected pollutant sources in the watershed and distribute the allowable pollutant loads among those various sources. When developed, the White Oak Creek TMDL will use the most current and available data. For this reason, the final TMDL may present information that differs from that contained in this information sheet.

Map of the White Oak Creek watershed



For more information call or write:

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